

FIG 2

Applicant: Dockser
 Docket: RPS9 2003 0152 US1
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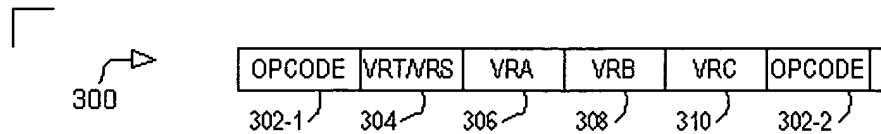


FIG 3

| | | |
|---|--|-----|
| PARALLEL ADD/SUBTRACT | $A_P + B_P \rightarrow T_P, A_S + B_S \rightarrow T_S$ | |
| MULTIPLY | | |
| PARALLEL | $A_P C_P \rightarrow T_P, A_S C_S \rightarrow T_S$ | 410 |
| CROSS | $A_S C_P \rightarrow T_P, A_P C_S \rightarrow T_S$ | 411 |
| CROSS COPY PRIMARY | $A_P C_P \rightarrow T_P, A_P C_S \rightarrow T_S$ | |
| CROSS COPY SECONDARY | $A_S C_P \rightarrow T_P, A_S C_S \rightarrow T_S$ | |
| MULTIPLY AND ADD/SUBTRACT | | 414 |
| PARALLEL | $A_P C_P + B_P \rightarrow T_P, A_S C_S + B_S \rightarrow T_S$ | 403 |
| PARALLEL NEGATE | $-(A_P C_P + B_P) \rightarrow T_P, -(A_S C_S + B_S) \rightarrow T_S$ | |
| PARALLEL SUBTRACT | $A_P C_P - B_P \rightarrow T_P, A_S C_S - B_S \rightarrow T_S$ | 409 |
| PARALLEL NEGATE SUBTRACT | $-(A_P C_P - B_P) \rightarrow T_P, -(A_S C_S - B_S) \rightarrow T_S$ | |
| CROSS | $A_S C_P + B_P \rightarrow T_P, A_P C_S + B_S \rightarrow T_S$ | 405 |
| CROSS NEGATE | $-(A_S C_P + B_P) \rightarrow T_P, -(A_P C_S + B_S) \rightarrow T_S$ | |
| CROSS SUBTRACT | $A_S C_P - B_P \rightarrow T_P, A_P C_S - B_S \rightarrow T_S$ | |
| CROSS NEGATE SUBTRACT | $-(A_S C_P - B_P) \rightarrow T_P, -(A_P C_S - B_S) \rightarrow T_S$ | |
| CROSS REPLICATE PRIMARY | $A_P C_P + B_P \rightarrow T_P, A_P C_S + B_S \rightarrow T_S$ | 406 |
| CROSS REPLICATE PRIMARY NEGATE | $-(A_P C_P + B_P) \rightarrow T_P, -(A_P C_S + B_S) \rightarrow T_S$ | |
| CROSS REPLICATE PRIMARY SUBTRACT | $A_P C_P - B_P \rightarrow T_P, A_P C_S - B_S \rightarrow T_S$ | |
| CROSS REPLICATE PRIMARY NEGATE SUBTRACT | $-(A_P C_P - B_P) \rightarrow T_P, -(A_P C_S - B_S) \rightarrow T_S$ | |
| CROSS REPLICATE SECONDARY | $A_S C_P + B_P \rightarrow T_P, A_S C_S + B_S \rightarrow T_S$ | |
| CROSS REPLICATE SECONDARY NEGATE | $-(A_S C_P + B_P) \rightarrow T_P, -(A_S C_S + B_S) \rightarrow T_S$ | |
| CROSS REPLICATE SECONDARY SUBTRACT | $A_S C_P - B_P \rightarrow T_P, A_S C_S - B_S \rightarrow T_S$ | |
| CROSS REPLICATE SECONDARY NEGATE SUB | $-(A_S C_P - B_P) \rightarrow T_P, -(A_S C_S - B_S) \rightarrow T_S$ | |
| ASYMMETRIC MULTIPLY AND ADD/SUB | | |
| CROSS COPY PRIMARY SUB PRIMARY | $-(A_P C_P - B_P) \rightarrow T_P, A_P C_S + B_S \rightarrow T_S$ | 407 |
| CROSS COPY SECONDARY SUB PRIMARY | $-(A_S C_P - B_P) \rightarrow T_P, A_S C_S + B_S \rightarrow T_S$ | |
| CROSS COPY PRIMARY SUB SECONDARY | $A_P C_P + B_P \rightarrow T_P, -(A_P C_S - B_S) \rightarrow T_S$ | |
| CROSS COPY SECONDARY SUB SECONDARY | $A_S C_P + B_P \rightarrow T_P, -(A_S C_S - B_S) \rightarrow T_S$ | |
| COMPLEX MULTIPLY AND ADD/SUBTRACT | | |
| CROSS COMPLEX SUB PRIMARY MULT ADD | $-(A_S C_S - B_P) \rightarrow T_P, A_S C_P + B_S \rightarrow T_S$ | 408 |
| CROSS COMPLEX SUB SECONDARY MULT ADD | $A_S C_S + B_P \rightarrow T_P, -(A_S C_P - B_S) \rightarrow T_S$ | |
| CROSS COMPLEX MULT ADD | $A_S C_S + B_P \rightarrow T_P, A_S C_P + B_S \rightarrow T_S$ | |
| CROSS COMPLEX NEGATIVE MULT SUBTRACT | $-(A_S C_S - B_P) \rightarrow T_P, -(A_S C_P - B_S) \rightarrow T_S$ | |
| MOVE, LOAD, STORE | | |
| CROSS MOVE | $B_P \rightarrow T_S, B_S \rightarrow T_P$ | |
| LOAD DOUBLE WORD | $DW[EA] \rightarrow T_P, DW[EA+8] \rightarrow T_S$ | |
| LOAD DOUBLE WORD CROSS | $DW[EA+8] \rightarrow T_P, DW[EA] \rightarrow T_S$ | |
| LOAD DOUBLE WORD REPLICATE | $DW[EA] \rightarrow T_P, T_S$ | |
| STORE DOUBLE WORD | $S_P \rightarrow DW[EA], S_S \rightarrow DW[EA+8]$ | |
| STORE DOUBLE WORD CROSS | $S_P \rightarrow DW[EA+8], S_S \rightarrow DW[EA]$ | |
| STORE DOUBLE WORD REPLICATE | $S_P, S_S \rightarrow DW[EA]$ | |

FIG 4